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EXAMINER
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FASTOVSKY, LEONID M

ART UNIT	PAPER NUMBER
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3742

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/029,533  
Filing Date: December 20, 2001  
Appellant(s): SANTORUVO ET AL.

\_\_\_\_\_  
Attorney Mr. H. Bennett II  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/06/06 appealing from the Office action mailed 4/5/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-5 and 16 stand rejected under 35 U.S.C. 102(b) as being anticipated by Cozad.

Cozad teaches an integrated heater 50 comprising a semiconductor material-silicon boiler 52 or 90 (col. 3, lines 40-46), at least one transistor 92 formed onto the semiconductor boiler 90 and is used as a heating source (Fig. 6 and col. 4, lines 44-50) to generate heat. Since Cozad, in col. 4, lines 48-49, states that the transistor is manufactured onto the boiler and the boiler is made out of semiconductor material (col. 3, lines 45-46), it is deemed that the transistor is formed in the semiconductor material as claimed. The limit of “generate heat above a selected threshold” recited in claim 1, line 4, is a broad recitation and since Cozad’s transistor is a heat source and generates heat it meets the limitation. Further, Cozad teaches a fluid retaining chamber integral with the semiconductor material 90, the wall of the chamber are formed from the semiconductor material, and a fluid 63 to be heated positioned within the chamber.

As to claim 4, Cozad teaches a semiconductor material 90 having a wall portion adjacent to the transistor 92 as shown in Fig. 6.

As to claim 5, Cozad includes a dielectric layer 58 extending over the semiconductor's 90 wall portion (Fig. 6), and facing towards the fluid chamber, being positioned between the semiconductor material 90 and the chamber, as seen in Fig. 6, wherein the fluid 63 covers the bottom part of the dielectric layer 58.

As to claim 16, Cozad teaches the dielectric layer 58 extending over a first face 74 of the semiconductor material 90 with the fluid 63 to be heated positioned adjacent to the dielectric layer 58 on a side thereof opposite the transistor 92 to receive the heat generated by the transistor 92.

#### **(10) Response to Argument**

As to Appellant's arguments that the transistor 92 is not formed into the semiconductor material, Cozad teaches the transistor 92 that can be formed into the semiconductor boiler 90 and used as a heating source (Fig. 6 and col. 4, lines 44-50) to generate heat, since the term "formed into" along with the other terms stated in the Appellant's arguments (page 13 of the brief) would mean that the transistor is formed into the semiconductor material since the boiler is made out of this material.

As to Appellant's arguments that Cozad's transistor does not "generate heat above a selected threshold", since the specification (page 8, lines 23-39) does not specifically define what is meant by a "selected threshold" and cites a very broad temperature range from a few degrees C to more than 1,000 C, this term is deemed to meet a

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threshold value selected by the user. Therefore since Cozad's transistor is a heat source that generates heat it would meet this limitation.

As to Appellant's arguments regarding "a dielectric layer extending over the semiconductor wall portion...", Cozad teaches a semiconductor material 90 having a wall portion adjacent to the transistor 92, including a dielectric layer 58 extending over the semiconductor's 90 wall portion, and facing towards the fluid chamber (which is defined by all the walls holding fluid 63, being positioned between the semiconductor material 90 and the chamber, as seen in Fig. 6, wherein the fluid 63 covers the bottom part of the dielectric layer 58, therefore Cozad meets these limitations.

As for Applicant's arguments regarding ' a dielectric layer extending over a first face...' Cozad teaches the dielectric layer 58 extending over a first face 68 of the semiconductor material 90 with the fluid 63 to be heated positioned adjacent to the dielectric layer 58 on a side thereof opposite the transistor 92 to receive the heat generated by the transistor 92.

As to Appellant's arguments that Cozad's transistor is a secondary heat source rather than a major heat generator, the examiner acknowledges this position, however the claim is silent to the transistor being a major or primary heat generator.


#### **(11) Related Proceeding(s)**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

  
Leonid Fastovsky

2/3/07

Conferees:

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